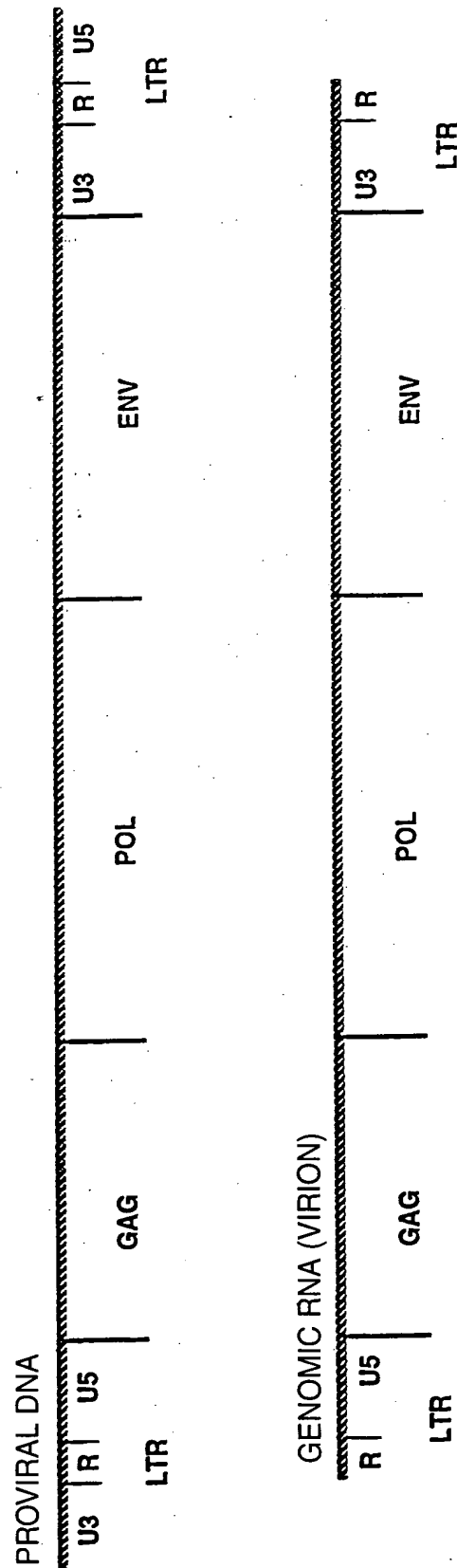


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Fig. 1



2/33  
Fig. 2

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
GCTTATAGAA	GGACCCCTAG	TATGGGGTAA	TCCCCCTCTGG	GAAACCAAGC	50
A Y R R	T P S M G .	S P L G	N Q A		
L I E	G P L V	W G N	P L W	E T K P	
L .	K D P .	Y G V I	P S G	K P S	
CCAGTACTC	AGCAGGAAAA	ATAGAATAGG	AAACCTCACA	AGGACATACT	100
P V L	S R K N	R I G	N L T	R T Y F	
Q Y S	A G K I E .	E T S Q	G H T		
P S T Q	Q E K .	N R	K P H K	D I L	
TTCCTCCCCCT	CCAGATGGCT	AGCCACTGAG	GAAGGAAAAA	TACTTTCAACC	150
P P L	Q M A S H .	G R K N	T F T		
F L P S	R W L A T E	E G K I	L S P		
S S P	P D G .	P L R	K E K	Y F H L	
TGCAGCTAAC	CAACAGAAAT	TACTTAAAAC	CCTTCACCAA	ACCTTCCACT	200
C S .	P T E I T .	N P S P N	L P L		
A A N	Q Q K L	L K T	L H Q	T F H L	
Q L T	N R N	Y L K P	F T K	P S T	
TAGGCATIGA	TAGCACCCAT	CAGATGGCCA	AATTATTATT	TACTGGACCA	250
R H .	. H P S	D G Q	I I I	Y W T R	
G I D	S T H	Q M A K	L L F	T G P	
. A L I	A P I	R W P	N Y Y L	L D Q	
GGCCTTTTCA	AAACTATCAA	GAAGATAGTC	AGGGGCTGTG	AAGTGTGCCA	300
P F Q	N Y Q	E D S Q	G L .	S V P	
G L F K	T I K	K I V	R G C E	V C Q	
A F S	K L S R	R .	S G A V	K C A K	
AAGAAATAAT					310
K K .					
R N N					
E I					

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Fig. 3A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
CCCTGTATCT	TTAACCTCT	TGTTAAGTT	GTCTCTTCCA	GAATCAAAC	50
P C I F	N L L	V K F	V S S R	I K T	
P V S	L T S L	L S L	S L P	E S K L	
L Y L	. P P C	. V C	L F Q	N Q N	
TGTAAACTA	CAAATTGTT	TTCAAATGA	GCACCAGATG	GAGTCCATGA	100
V K L	Q I V L	Q M E	H Q M	E S M T	
. N Y	K L F	F K W S	T R W	S P .	
C K T T	N C S	S N G	A P D G	V H D	
CTAAGATCCA	CCGTGGACCC	CTGGACCGGC	CTGCTAGCCC	ATGCTCCGAT	150
K I H	R G P	L D R P	A S P	C S D	
L R S T	V D P	W T G	L L A H	A P M	
. D P	P W T P	G P A	C . P	M L R C	
GTTAATGACA	TTGAAGGCAC	CCCTCCCGAG	GAAATCTCAA	CTGCACAACC	200
V N D I	E G T	P P E	E I S T	A Q P	
L M T	L K A P	L P R	K S Q	L H N P	
. . H	. R H	P S R G	N L N	C T T	
CCTACTATGC	CCCAATTGAG	CGGGAAGCAG	TTAGAGCGGT	CATCAGCCAA	250
L L C	P N S A	G S S	. S G	H Q P T	
Y Y A	P I Q	R E A V	R A V	I S Q	
P T M P	Q F S	G K Q	L E R S	S A N	
CCTCCCCAAC	AGCACTTGGG	TTTTCCTGTT	GAGAGGGGGG	ACTGAGAGAC	300
S P T	A L G	F S C	. E G G	L R D	
P P Q Q	H L G	F P V	E R G D	. E T	
L P N	S T W V	F L L	R G G	T E R Q	
AGGACTAGCT	GGATTTCCTA	GGCCAACGAA	GAATCCCTAA	GCCTAGCTGG	350
R T S W	I S .	A N E	E S L S	L A G	
G L A	G F P R	P T K	N P .	A . L G	
D . L	D F L	G Q R R	I P K	P S W	

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Fig. 3B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
GAAGGTGACT	GCATCCACCT	CTAAACATGG	GGCTTGCAAC	TTAGCTCACA	400
K V T	A S T S	K H G	A C N	L A H T	
R . L	H P P	L N M G	L A T	. L T	
E G D C	I H L	. T W	G L Q L	S S H	
CCCGACCAAT	CAGAGAGCTC	ACTAAAATGC	TAATTAGGCA	AAAATAGGAG	450
R P I	R E L	T K M L	I R Q	K . E	
P D Q S	E S S	L K C	. L G K	N R R	
P T N	Q R A H	. N A N	. A K I	G G	
GTAAAGAAAT	AGCCAATCAT	CTATTGCCTG	AGAGCACAGC	GGGAGGGACA	500
V K K .	P I I	Y C L	R A Q R	E G Q	
. R N	S Q S S	I A .	E H S	G R D K	
K E I	A N H	L L P E	S T A	G G T	
AGGATCGGGA	TATAAACCCA	GGCATTGAG	COGGCAACGG	CAACCCCTT	550
G S G	Y K P R	H S S	R Q R	Q P P L	
D R D	I N P	G I R A	G N G	N P L	
R I G I	. T Q	A F E	P A T A	T P F	
TGGGTCCCT	CCCTTGTAT	GGGGCTCTG	TTTTCACCT	ATTTCACCT	600
G P L	P L Y	G R S V	F T L	F H S	
W V P S	L C M	G A L	F S L Y	F T L	
G S P	P F V W	A L C	F H S	I S L Y	
ATTAAATCTT	GCAACTGAAA	AAAAAAAAAA	AAAAA		635
I K S C	N . K	K K K	K		
L N L	A T E K	K K K	K		
. I L	Q L K	K K K	K		

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Fig. 4A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
ATGGCCCTCC	CTTATCATAC	TTTCTCTTT	ACTGTTCTCT	TACCCCTTT	50
M A L P	Y H T	F L F	T V L L	P P F	
W P S	L I I L	F S L	L F S	Y P L S	
G P P	L S Y	F S L Y	C S L	T P F	
CGCTCTCACT	GCACCCCTC	CATGCTGCTG	TACAACCAGT	AGCTCCCTT	100
A L T	A P P P	C C C	T T S	S S P Y	
L S L	H P L	H A A V	Q P V	A P L	
R S H C	T P S	M L L	Y N Q	L P L	
ACCAAGAGTT	TCTATGAAGA	ACGCGGCTTC	CTGGAAATAT	TGATGCCCCA	150
Q E F	L . R	T R L P	G N I	D A P	
T K S F	Y E E	R G F	L E I L	M P H	
P R V	S M K N	A A S	W K Y	C P I	
TCATATAGGA	GTTTATCTAA	GGGAAACTCC	ACCTTCACTG	CCCACACCCA	200
S Y R S	L S K	G N S	T F T A	H T H	
H I G	V Y L R	E T P	P S L	P T P I	
I . E	F I .	G K L H	L H C	P H P	
TATGCCCCGC	AACTGCTATA	ACTCTGCCAC	TCTTTGCATG	CATGCAAATA	250
M P R	N C Y N	S A T	L C M	H A N T	
C P A	T A I	T L P L	F A C	M Q I	
Y A P Q	L L .	L C H	S L H A	C K Y	
CTCATTATTG	GACAGGGAAA	ATGATTAAATC	CTAGTTGTCC	TGGAGGACTT	300
H Y W	T G K	M I N P	S C P	G G L	
L I I G	Q G K	L I	L V V L	E D L	
S L L	D R E N	D . S	L S	W R T W	
GGAGCCACTG	TCTGTTGGAC	TTACTTCACC	CATACCAGTA	TGTCTGATGG	350
G A T V	C W T	Y F T	H T S M	S D G	
E P L	S V G L	T S P	I P V	C L M G	
S H C	L L D	L L H P	Y Q Y	V . W	

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Fig. 4B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
GGGTGGAATT	CAAGGTCAGG	CAAGAGAAAA	ACAAGTAAAG	GAAGCAATCT	400
G G I	Q G Q A	R E K	Q V K	E A I S	
V E F	K V R	Q E K N	K * R	K Q S	
G W N S	R S G	K R K	T S K G	S N L	
CCCAACTGAC	CCGGGGACAT	AGCACCCCTA	GCCCCTACAA	AGGACTAGTT	450
Q L T	R G H	S T P S	P Y K	G L V	
P N * P	G D I	A P L	A P T K	D * F	
P T D	P G T *	H P *	P L Q	R T S S	
CTCTCAAAC	TACATGAAAC	CCTCCGTACC	CATACTCGCC	TGGTGAGCCT	500
L S K L	H E T	L R T	H T R L	V S L	
S Q N	Y M K P	S V P	I L A	W * A Y	
L K T	T * N	P P Y P	Y S P	G E P	
ATTTAATACC	ACCCTCACTC	GGCTCCATGA	GGTCTCAGCC	CAAACCCCTA	550
F N T	T L T R	L H E	V S A	Q N P T	
L I P	P S L	G S M R	S Q P	K T L	
I * Y H	P H S	A P *	G L S P	K P Y	
CTAACTGTTG	GATGTGCCTC	CCCCTGCACT	TCAGGCCATA	CATTTCAATC	600
N C W	M C L	P L H F	R P Y	I S I	
L T V G	C A S	P C T	S G H T	F Q S	
* L L	D V P P	P A L	Q A I	H F N P	
CCTGTTCTTG	AACAATGGAA	CAACTTCAGC	ACAGAAATAA	ACACCACTTC	650
P V P E	Q W N	N F S	T E I N	T T S	
L E L	N N G T	T S A	Q K *	T P L P	
C S *	T M E	Q L Q H	R N K	H H F	
CGTTTTAGTA	GGACCTCTTG	TTTCCAATCT	GGAAATAACC	CATACCTCAA	700
V L V	G P L	V S N L	E I T	H T S N	
F * *	D L L	F P I W	K * P	I P Q	
R F S R	T S C	F Q S	G N N P	Y L K	

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Fig. 4C

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
ACCTCACCTG	TGTAATAATT	AGCAATACTA	TAGACACAAC	CAGCTCCCAA	750
L T C	V K F	S N T I	D T T	S S Q	
T S P V	. N L	A I L	. T Q P	A P N	
P H L	C K I	. Q Y Y	R H N	Q L P M	
TGCATCAGGT	GGGTAAACACC	TCCCACACGA	ATAGTCTGCC	TACCCCTCAGG	800
C I R W	V T P	P T R	I V C L	P S G	
A S G	G . H L	P H E	. S A	Y P Q E	
H Q V	G N T	S H T N	S L P	T L R	
AATATTTTTT	GTCTGTGGTA	CCTCAGCCTA	TCATTGTTTG	AATGGCTCTT	850
I F F	V C G T	S A Y	H C L	N G S S	
Y F L	S V V	P Q P I	I V .	M A L	
N I F C	L W Y	L S L	S L F E	W L F	
CAGAATCTAT	GTCCTTCCCTC	TCATTCTTAG	TGCCCCCTAT	GACCATCTAC	900
E S M	C F L	S F L V	P P M	T I Y	
Q N L C	A S S	H S .	C P L .	P S T	
R I Y	V L P L	I L S	A P Y	D H L H	
ACTGAACAAG	ATTATACAA	TCATGTGCTA	CCTAAGCCCC	ACAACAAAAG	950
T E Q D	L Y N	H V V	P K P H	N K R	
L N K	I Y T I	M S Y	L S P	T T K E	
. T R	F I Q	S C R T	. A P	Q Q K	
AGTACCCATT	CTTCCTTTTG	TTATCAGAGC	AGGAGTGCTA	GCCAGACTAG	1000
V P I	L P F V	I R A	G V L	G R L G	
Y P F	F L L	L S E Q	E C .	A D .	
S T H S	S F C	Y Q S	R S A R	Q T R	
GTACTGGCAT	TGGCAGTATC	ACAACCTCTA	CTCAGTTCTA	CTACAAACTA	1050
T G I	G S I	T T S T	Q F Y	Y K L	
V L A L	A V S	Q P L	L S S T	T N Y	
Y W H	W Q Y H	N L Y	S V L	L Q T I	

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Fig. 4D

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
TCTCAAGAAA	TAAATGGTGA	CATGGAACAG	GTCACTGACT	COCTGGTCAC	1100
S Q E I	N G D M E Q	V T D S	L V T		
L K K	M V T W N R	S L T P W	S P		
S R N K W	H G T G	H	L P G H		
CTTGCAAGAT	CAACTTAACT	COCTAGCAGC	AGTAGTCCTT	CAAAATCGAA	1150
L Q D Q L N S	L A A V V L	Q N R R			
C K I N L T P	Q Q	S F K I E			
L A R S T	L P S S	S S P S	K S K		
GAGCTTTAGA	CTTGCTAACC	GCCAAAAGAG	GGGGAAOCTG	TTTATTTTIA	1200
A L D L L T A K R G	G T C L F L				
E L T C P P K E	G E P V Y F				
S F R L A N R	Q K R G N L	F I F R			
GGAGAAGAAC	GCTGTATTA	TGTTAATCAA	TCCAGAATTG	TCACIGAGAA	1250
G E E R C Y Y V N Q	S R I V T E K				
E K N A V I M L I N	P E L S L R K				
R R T L L L C	S I Q N C H	E			
AGTTAAAGAA	ATTGAGATC	GAATACAATG	TAGAGCAGAG	GAGCTTCAAA	1300
V K E I R D R I Q C	R A E E L Q N				
L K K F E I E Y N V	E Q R S F K				
S R N S R S N T M	S R G A S K				
ACACCGAACG	CTGGGGOCTC	CTCAGCCAAT	GGATGCCCTG	GGTTCTCCCC	1350
T E R W G L L S Q W	M P W V L P				
T P N A G A S S A N	G C P G F S P				
H R T L G P P Q P M	D A L G S P L				
TTCTTAGGAC	CTCTAGCAGC	TCTAATATTG	TTACTOCTCT	TTGGACCOCTG	1400
F L G P L A A L I L	L L L F G P C				
S D L Q L Y C Y S S	L D P V				
L R T S S S S N I V	T P L W T L				



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Fig. 4E

10	20	30	40	50
1234567890	1234567890	1234567890	1234567890	1234567890
TATCTTTAAC	CTCCTIGTTA	AGTTTGTCIC	TTCCAGAATT	GAAGCTGTAA
I F N L L V K	F V S S R I	E A V K		
S L T S L L	S L S L	P E L K L		
Y L . P P C .	V C L F Q N .	S C K		
AGCTACAGAT	GGTCTTACAA	ATGGAACCCC	A	
L Q M V L Q	M E P			
S Y R W S Y K	W N P			
A T D G L T N	G T P			

1450

1481

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Fig. 5A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
TCAAATCGA	AGAGCTTTAG	ACTTGCTAAC	CGCCAAAAGA	GGGGGAACCT	50
S K S K	S F R	L A N	R Q K R	G N L	
Q N R	R A L D	L L T	A K R	G G T C	
K I E	E L .	T C .	P P K E	G E P	
GTITATTTTT	AGGGGAAGAA	TGCTGTTAGT	ATGTTAATCA	ATCTGGAATC	100
F I F	R G R M	L L V	C . S	I W N H	
L F L	G E E	C C .	Y V N Q	S G I	
V Y F .	G K N	A V S	M L I N	L E S	
ATTACTGAGA	AAGTTAAAGA	AATTTGAGAT	CGAATATAAT	GTAGAGCAGA	150
Y . E	S . R	N L R S	N I M .	S R	
I T E K	V K E	I . D	R I . C	R A E	
L L R	K L K K	F E I	E Y N	V E Q R	
GGACCTTCAA	AACACTGCAC	CCTGGGGGCT	CCTCAGCCAA	TGGATGCCCT	200
G P S K	H C T	L G P	P Q P M	D A L	
D L Q	N T A P	W G L	L S Q	W M P W	
T F K	T L H	P G A S	S A N	G C P	
GGACTCTCCC	CTTCTTAGGA	CCTCTAGCAG	CTATAATATT	TTTACTCCTC	250
D S P	L L R T	S S S	Y N I	F T P L	
T L P	F L G	P L A A	I I F	L L L	
G L S P	S . D	L . Q	L . Y F	Y S S	
TTTGGACCCCT	GTATCTTCAA	CTTCCTTGTT	AAGTTTGTCT	CTTCCAGAAT	300
W T L	Y L Q	L P C .	V C L	F Q N	
F G P C	I F N	F L V	K F V S	S R I	
L D P	V S S T	S L L	S L S	L P E L	
TGAAGCTGTA	AAGCTACAAA	TAGTTCTTCA	AATGGAACCC	CAGATGCAGT	350
. S C K	A T N	S S S	N G T P	D A V	
E A V	K L Q I	V L Q	M E P	Q M Q S	
K L .	S Y K .	F F K	W N P	R C S	

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Fig. 5B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
CCATGACTAA	AATCTACCGT	GGACCCCTGG	ACCGGCCTGC	TAGACTATGC	400
H D .	N L P W	T P G	P A C	. T M L	
M T K	I Y R	G P L D	R P A	R L C	
P . L K	S T V	D P W	T G L L	D Y A	
TCTGATGTIA	ATGACATTGA	AGTCACCCCT	CCCGAGGAAA	TCTCAACTGC	450
. C .	. H .	S H P S	R G N	L N C	
S D V N	D I E	V T P	P E E I	S T A	
L M L	M T L K	S P L	P R K	S Q L H	
ACAACCCCTA	CTACACTCCA	ATTGAGTAGG	AAGCAGTTAG	AGCAGTTGTC	500
T T P T	T L Q	F S R	K Q L E	Q L S	
Q P L	L H S N	S V G	S S .	S S C Q	
N P Y	Y T P	I Q .	E A V R	A V V	
AGCCAACTC	CCCAACAGTA	CTTGGGTTTT	CCTGTTGAGA	GGGTGGACTG	550
A N L	P N S T	W V F	L L R	G W T E	
P T S	P T V	L G F S	C . E	G G L	
S Q P P	Q Q Y	L G F	P V E R	V D .	
AGAGACAGGA	CTAGCTGGAT	TTCCTAGGCT	GACTAAGAAT	CCCAAGCCT	600
R Q D .	L D F L G .	L R I	P K P		
R D R T	S W I S .	A D .	E S X S L		
E T G	L A G F	P R L	T K N	P X A X	
ANCTGGGAAG	GTGACCGCAT	CCATCTTTAA	ACATGGGGCT	TGCAACTTAG	650
X W E G	D R I H L .	T W G L	Q L S		
X G K	V T A S	I F K	H G A	C N L A	
L G R .	P H P S L N	M G L	A T .		
CTCACACCCG	ACCAATCAGA	GAGCTCACTA	AAATGCTAAT	CAGGCAAAAA	700
S H P	T N Q R	A H .	N A N	Q A K T	
H T R	P I R	E L T K	M L I	R Q K	
L T P D	Q S E	S S L	K C .	S G K N	

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Fig. 5C

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
CAGGAGGTAA	AGCAATAGCC	AATCATCTAT	TGCTGAGAG	CACAGCGGGA	750
G G K	A I A	N H L L	P E S	T A G	
Q E V K	Q . P	I I Y	C L R A	Q R E	
R R .	S N S Q	S S I	A . E	H S G K	
AGGACAAGGA	TGGGATATA	AACTCAGGCA	TTCAAGCCAG	CAACAGCAAC	800
R T R I	G I .	T Q A	F K P A	T A T	
G Q G	L G Y K	L R H	S S Q	Q Q Q P	
D K D	W D I	N S G I	Q A S	N S N	
CCCCTTTGGG	TCCCCTCCCA	TTGTATGGGA	GCTCTGTTTT	CACTCTATTT	850
P F G	S P P I	V W E	L C F	H S I S	
P L G	P L P	L Y G S	S V F	T L F	
P L W V	P S H	C M G	A L F S	L Y F	
CACTCTATTA	AATCATGCAA	CTGCACCTCT	CTGGTCCGIG	TTTTTATGG	900
L Y .	I M Q	L H S S	G P C	F L W	
H S I K	S C N	C T L	L V R V	F Y G	
T L L	N H A T	A L F	W S V	F F M A	
CTCAAGCTGA	GCTTTTGTTC	GCCATCCACC	ACTGCTGTTT	GCCACCGICA	950
L K L S	F C S	P S T	T A V C	H R H	
S S .	A F V R	H P P	L L F	A T V T	
Q A E	L L F	A I H H	C C L	P P S	
CAGACCGCT	GCTGACTTCC	ATCCCTTTGG	ATCCAGCAGA	GIGTCCACTG	1000
R P A	A D F H	P F G	S S R	V S T V	
D P L	L T S	I P L D	P A E	C P L	
Q T R C	. L P	S L W	I Q Q S	V H C	
TGCTCTGAT	CCAGCGAGGT	ACCCATTGCC	ACTCCCGATC	AGGCTAAAGG	1050
L L I	Q R G	T H C H	S R S	G . R	
C S .	S S E V	P I A	T P D Q	A K G	
A P D	P A R Y	P L P	L P I	R L K A	

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Fig. 5D

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
CTTGCCATTG	TTCCTGCATG	GCTAAGTGCC	TGGGTTTGIC	CTAATAGAAC	1100
L A I V	P A W	L S A	W V C P	N R T	
L P L	F L H G	. V P	G F V	L I E L	
C H C	S C M	A K C L	G L S	. . N	
TGAACACTGG	TCACTGGGTT	CCATGGTTCT	CTTCCATGAC	CCACGGCTTC	1150
E H W	S L G S	M V L	F H D	P R L L	
N T G	H W V	P W F S	S M T	H G F	
. T L V	T G F	H G S	L P .	P T A S	
TAATAGAGCT	ATAACACTCA	CCGCATGGCC	CAAGATTCCA	TTCCTTGGTA	1200
I E L	. H S	P H G P	R F H	S L V	
. . S Y	N T H	R M A	Q D S I	P W Y	
N R A	I T L T	A W P	K I P	F L G I	
TCTGTGAGGC	CAAGAACCCC	AGGTCAGAGA	ANGTGAGGCT	TGCCAOCATT	1250
S V R P	R T P	G Q R	X . G L	P P F	
L . G	Q E P Q	V R E	X E A	C H H L	
C E A	K N P	R S E X	V R L	A T I	
TGGGAAGTGG	CCCACTGCCA	TTTIGGTAGC	GGCCCCACCAC	CATCTTGGGA	1300
G K W	P T A I	L V A	A H H	H L G S	
G S G	P L P	F W .	R P T T	I L G	
W E V A	H C H	F G S	G P P P	S W E	
GCTGTGGGAG	CAAGGATCCC	CCAGTAACA			1329
C G S	K D P	P V T			
A V G A	R I P	Q .			
L W E	Q G S	P S N			

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Fig. 6A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
CCTAGAACGT	ATTCTGGAGA	ATTGGGACCA	ATGTGACACT	CAGACGCTAA	50
P R T Y	S G E L	G P M .	H S .	D A K	
L E R	I L E N	W D Q .	C D T	Q T L R	
. N V	F W R	I G T N	V T L	R R .	
GAAAGAAAG	ATTTATATTC	TTCTGCAGTA	CCGCTGGCC	ACAATATCCT	100
K E T	I Y I L	L Q Y	R L A	T I S S	
K K R	F I F	F C S T	A W P	Q Y P	
E R N D	L Y S	S A V	P P G H	N I L	
CTTCAAGGA	GAGAAACCTG	GCTTCTGAG	GGAAGTATAA	ATTATAACAT	150
S R E	R N L	A S .	G K Y K	L . H	
L Q G R	E T W	L P E	G S I N	Y N I	
F K G	E K P G	F L R	E V .	I I T S	
CATCTTACAG	CTAGACCTCT	TCTGTAGAAA	GGAGGGCAAA	TGGAGTGAAG	200
H L T A	R P L .	L . K	G G Q M	E . S	
I L Q .	L D L F	C R K	E G K	W S E V	
S Y S .	T S	S V E R	R A N	G V K	
TGCCATATGT	GCAAACCTTC	TTTTCATTAA	GAGACAATC	ACAATTATGT	250
A I C	A N F L	F I K	R Q L	T I M .	
P Y V	Q T F	F S L R	D N S	Q L C	
C H M C	K L S	F H .	E T T H	N Y V	
AAAAAGTGTG	GTTTATGCCC	TACAGGAAGC	CCTCAGAGTC	CACTTCCCTA	300
K V W	F M P	Y R K P	S E S	T S L	
K K C G	L C P	T G S	P Q S P	P P Y	
K S V	V Y A L	Q E A	L R V	H L P T	
CCCCAGGTC	CCCTCCCCGA	CTCCTTCTC	AACTAATAAG	GACCCCCCTT	350
P Q R P	L P D	S F L N .	G P P F		
P S V	P S P T	P S S	T N K	D P P L	
P A S	P P R	L L P Q	L I R	T P L	
TAAOCCAAAC	GGTCCAAAAG	GAGATAGACA	AAGGGGTAAA	CAATGAACCA	400
N P N	G P K G	D R Q	R G K	Q . T K	
T Q T	V Q K	E I D K	G V N	N E P	
. P K R	S K R	R . T	K G .	T M N Q	
AAGAGTGGCA	ATATTCCCCG	ATTATGCCCC	CTCCAAGCAG	TGACAGGAGG	450
E C Q	Y S P	I M P P	P S S	E R R	
K S A N	I P R	L C P	L Q A V	R G G	
R V P	I F P D	Y A P	S K Q .	E E E	
AGAATTGGGC	CCAGCCAGAG	TGCTGTAC	TTTTTCTCTC	TCAGACTTAA	500
R I R P	S Q S	A C T	F F S L	R L K	
E F G	P A R V	P V P	F S L	S D L K	
N S A	Q P E	C L Y L	F L S	Q T .	

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Fig. 6B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
AGCAAATTAA	AATAGACCTA	GGTAAATTCT	CAGATAAACC	TGACGGCTAT	550
A N .	N R P R .	I L R .	P .	R L Y	
Q I K	I D L	G K F S	D N P	D G Y	
S K L K	. T .	V N S	Q I T L	T A I	
ATTGATGTTT	TACAAGGGTT	AGGACAATCC	TTTGATCTGA	CATGGAGAGA	600
. C F	T R V	R T I L	. S D	M E R	
I D V L	Q G L	G Q S	F D L T	W R D	
L M F	Y K G .	D N P	L I .	H G E I	
TATAATGTTA	CTACTAAATC	AGACACTAAC	CCCAAATGAG	AGAAGTGGCG	650
Y N V T	T K S	D T N	P K .	E K C R	
I M L	L L N Q	T L T	P N E	R S A A	
. C Y Y .	I R H .	P	Q M R	E V P	
CTGTAAC TGC	AGCCCGAGAG	TTTGGGATC	TTTGGTATCT	CAGTCAGGCC	700
C N C	S P R V	W R S	L V S	Q S G Q	
V T A	A R E	F G D L	W Y L	S Q A	
L .	L Q	P E S	L A I	F G I S .	V R P
AACAATAGGA	TGACAACAGA	GGAAAGAACA	ACTCCACAG	GCCAGCAGGC	750
Q .	D D N R	G K N N	S H R	P A G	
N N R M	T T E	E R T	T P T G	Q Q A	
T I G .	Q Q R	K E Q	L P Q	A S R Q	
AGTCCCACT	GTAGACCTC	ATTGGGACAC	AGAATCAGAA	CATGGAGATT	800
S S Q C	R P S	L G H	R I R T	W R L	
V P S	V D P H	W D T	E S E	H G D W	
F P V .	T L	I G T Q	N Q N	M E I	
GGTGGCACA	ACATTTCCTA	ACTTGGGTGC	TAGAAGGACT	GAGGAAACT	850
V P Q	T F A N	L R A	R R T	E E N .	
C H K	H L L	T C V L	E G L	R K T	
G A T N	I C .	L A C .	K D .	G K L	
AGGAGAAGC	CTATGAATTA	CTCAATGATG	TCCACTATAA	CACAGGAAA	900
E E A	Y E L	L N D V	H Y N	T G K	
R K K P	M N Y	S M M	S T I T	Q G K	
G R S	L .	I T Q .	C P L .	H R E R	
GGAAGAAAT	CTTACTGCTT	TTCTGGACAG	ACTAAGGGAG	GCATTGAGGA	950
G R K S	Y C F	S G Q	T K G G	I E E	
E E N	L T A F	L D R	L R E	A L R K	
K K I	L L L	F W T D	. G R H .	G	
AGCATACCTC	CCTGTACCT	GACTCTATTG	AAGGCAACT	AATCTTAAAG	1000
A Y L	P V T .	L Y .	R P T	N L K G	
H T S	L S P	D S I E	G Q L	I L K	
S I P P	C H L	T L L	K A N .	S . R	

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Fig. 6C

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
GATAAGTTTA	TCACTCAGTC	AGCTGCAGAC	ATTAGAAAAA	ACTTCAAAAG	1050
V Y H S V	S C R H	K K	L Q K		
D K F I	T Q S A A D	I R K N	F K S		
I S L S	L S Q L Q T	L E K	T S K V		
TCTGCCCTTAG	GCCCCGAGCA	GAACCTAGAA	ACCCATATTA	ACTTGGCATC	1100
S A L G	P E Q N L E	T L F N	L A S		
L P	A R S R T	K P Y L	T W H P		
C L R	P G A E L R N	P I	L G I		
CTCAGTTTTT	TATAATAGAG	ATCAGGAGGA	GCAGGGGAAA	CGGGACAAAC	1150
S V F	Y N R D	Q E E	Q A K	R D K R	
Q F F	I I E I R R S	R R N	G T N		
L S F L	R S G G	A G E T	G Q T		
GGGATAAAAA	AAAAAGGGGG	GGTCCACTAC	TTTAGTCATG	GCCCTCAGGC	1200
D K K	K R G G P L L	S W	P S G		
G I K K	K G G V H Y	F S H G	P Q A		
G	K K K G G S T T	L V M	A L R Q		
AAGCAGACTT	TGGAGGCTCT	GCAAAAGGGA	AAAGCTGGGC	AAATCAAATG	1250
K Q T L	E A L Q K G	K A G Q	I K C		
S R L	W R L C K R E	K L G	K S N A		
A D F	G G S A K G K	S W A	N Q M		
OCTAATAGGG	CTGGCTTCCA	GTGGGGTCTA	CAAGGACACT	TTAAAAAGA	1300
L I G	L A S S A V Y	K D T	L K K I		
G	W L P V R S T	R T L	K R		
P N R A	G F Q C G L	Q G H F	K K D		
TTATCCAAGT	AGAAATAAGC	CGCCCCCTTG	TCCATGCCCC	TTAAGTCAAG	1350
I Q V	E I S R P L V	H A P	Y V K		
L S K	K A A P L	S M P L	T S R		
Y P S	R N K P P P C	P C P	L R Q G		
GGAATCACTG	GAAGGCCCCAC	TGCCCCAGGG	GATGAAGATA	CTCTGAGTCA	1400
G I T G	R P T A P G	D E D T	L S Q		
E S L	E G P L P Q G	M K I	L V R		
N H W	K A H C P R G	R Y	S E S		
GAAGCATTA	ACCAGATGAT	CCAGCAGCAG	GACTGAGGGT	GGCCCCGGGG	1450
K P L	T R S S S R	T E G	A R G E		
S H	P D D P A A G	L R V	P G A		
E A I N	Q M I Q Q Q	D G C	P G R		
AGGCCCAGCC	CATGCCATCA	CCCTCAGAGA	GGCCCCGGGTA	TGTTTGACCA	1500
R Q P	M P S P S Q S	P G Y	V P		
S A S P	C H H P H R	A P G M	F D H		
A P A	H A I T L T E	P R V	C L T I		



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Fig. 6D

10	20	30	40	50
1234567890	1234567890	1234567890	1234567890	1234567890
TTGAGAGCCA A				1511
L	R	A		
	E	P		
E	S	Q		

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Fig. 7A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
ATGGGCAGCA	GCCATCATCA	TCATCATCAC	AGCAGCGGCC	TGGTGGCGCG	50
M G S S	H H H	H H H	S S G L	V P R	
CGGCAGCCAT	ATGGCTAGCA	TGACTGGTGG	ACAGCAAATG	GGTGGGATCC	100
G S H	M A S M	T G G	Q Q M	G R I L	
TAGAACGTAT	TCTGGAGAAT	TGGGACCAAT	GTGACACTCA	GACGCTAAGA	150
E R I	L E N	W D Q C	D T Q	T L R	
AAGAAACGAT	TTATATTCTT	CTGCAGTACC	GCCTGGCCAC	AATATCCTCT	200
K K R F	I F F	C S T	A W P Q	Y P L	
TCAAGGGAGA	GAAACCTGGC	TTCCIGAGGG	AAGTATAAAT	TATAACATCA	250
Q G R	E T W L	P E G	S I N	Y N I I	
TCTTACAGCT	AGACCTCTTC	TGTAGAAAGG	AGGGCAAATG	GAGTGAAGTG	300
L Q L	D L F	C R K E	G K W	S E V	
CCATATGTGC	AAACTTTCTT	TTCATTAAGA	GACAACTCAC	AATTATGTAA	350
P Y V Q	T F F	S L R	D N S Q	L C K	
AAAGTGTGGT	TTATGGCCCTA	CAGGAAGCCC	TCAGAGTCCA	CCTCCCTACC	400
K C G	L C P T	G S P	Q S P	P P Y P	
CCAGGTCCC	CTCCCGACT	CCTTCCTCAA	CTAATAAGGA	CCCCCCTTTA	450
S V P	S P T	P S S T	N K D	P P L	
ACCCAAACGG	TCCAAAAGGA	GATAGACAAA	GGGTAAACA	ATGAACCAAA	500
T Q T V	Q K E	I D K	G V N N	E P K	
GAGTGCAT	ATTCCCCGAT	TATGCCCCCT	CCAAGCAGTG	AGAGGAGGAG	550
S A N	I P R L	C P L	Q A V	R G G E	
AATTGGGCC	AGCCAGAGTG	CCTGTACCTT	TTTCTCTCTC	AGACTTAAAG	600
F G P	A R V	P V P F	S L S	D L K	
CAAATTAAAA	TAGACCTAGG	TAAATTCTCA	GATAACCTTG	AAGGCTATAT	650
Q I K I	D L G	K F S	D N P D	G Y I	
TGATGTTTTA	CAAGGGTTAG	GACAATCCTT	TGATCTGACA	TGGAGAGATA	700
D V L	Q G L G	Q S F	D L T	W R D I	
TAATGTTACT	ACTAAATCAG	ACACTAACC	CAAATGAGAG	AAGTGGCGCT	750
M L L	L N Q	T L T P	N E R	S A A	

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Fig. 7B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
GTAACTGCAG	COOGAGAGTT	TGGCGATCITT	TGGTATCTCA	GTCAGGOCOA	800
V T A A	R E F	G D L	W Y L S	Q A N	
CAATAGGATG	ACAACAGAGG	AAAGAACAAC	TCCCACAGGC	CAGCAGGCAG	850
N R M	T T E E	R T T	P T G	Q Q A V	
TTCCCAGTGT	AGACCCTCAT	TGGGACACAG	AATCAGAACA	TGGAGATTGG	900
P S V	D P H	W D T E	S E H	G D W	
TGCCACAAAC	ATTTGCTAAC	TTGGGTGCTA	GAAAGACTGA	GGAAAACTAG	950
C H K H	L L T	C V L	E G L R	K T R	
GAAGAAGCCT	ATGAATTACT	CAATGATGTC	CACTATAACA	CAGGGAAGG	1000
K K P	M N Y S	M M S	T I T	Q G K E	
AAGAAAATCT	TACTGCTTTT	CTGGACAGAC	TAAGGGAGGC	ATTGAGGAAG	1050
E N L	T A F	L D R L	R E A	L R K	
CATACTOCC	TGTCACCTGA	CTCTATTGAA	GGCCAACTAA	TCTTAAAGGA	1100
H T S L	S P D	S I E	G Q L I	L K D	
TAAGTTTATC	ACTCAGTCAG	CTGCAGACAT	TAGAAAAAAC	TTCAAAAGTC	1150
K F I	T Q S A	A D I	R K N	F K S L	
TGCTTAAGCT	TGCGGCGCA	CTCGAGCAAC	ACCACCACCA	CCACTGAGAT	1200
P K L	A A A	L E H H	H H H	H . D	
COGGCTGCTA	ACAAAGCCCG	AAAGGAAGCT	GAGTTGGCTN	GTGGCNA	1247
P A A N	K A R	K E A	E L A X	G	

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Fig. 8A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
ATGGCTAGCA	TGACTGGTGG	ACAGCAAATG	GGTCGGATCC	TAGAAAGTAT	50
M A S M	T G G	Q Q M	G R I L	E R I	
TCTGGAGAAT	TGGGACCAAT	GTGACACTCA	GACGCTAAGA	AAGAAAGGAT	100
L E N	W D Q C	D T Q	T L R	K K R F	
TTATATTCIT	CTGCAGTACC	GCCTGGCCAC	AATATCCTCT	TCAAGGGAGA	150
I F F	C S T	A W P Q	Y P L	Q G R	
GAAACCTGGC	TTCTGAGGG	AAGTATAAAT	TATAACATCA	TCTTACAGCT	200
E T W L	P E G	S I N	Y N I I	L Q L	
AGACCTCTTC	TGTAGAAAGG	AGGCAAATG	GAGTGAAGTG	CCATATGTGC	250
D L F	C R K E	G K W	S E V	P Y V Q	
AAACTTTCTT	TTCAATTAAGA	GACAACTCAC	AATTATGTAA	AAAGTGTGGT	300
T F F	S L R	D N S Q	L C K	K C G	
TTATGCCCTA	CAGGAAGCCC	TCAGAGTCCA	CCTCCCTACC	CCAGCGTCCC	350
L C P T	G S P	Q S P	P P Y P	S V P	
CTCCCCGACT	CCTTCTCTCA	CTAATAAGGA	CCCCCTTTA	ACCCAAACGG	400
S P T	P S S T	N K D	P P L	T Q T V	
TCAAAAGGA	GATAGACAAA	GGGTAAACA	ATGAACCAA	GAGTGGCAAT	450
Q K E	I D K	G V N N	E P K	S A N	
ATTCCCCGAT	TATGCCCCCT	CCAAGCAGTG	AGAGGAGGAG	AATTCCGCCC	500
I P R L	C P L	Q A V	R G G E	F G P	
AGCCAGAGTG	CCTGTACCTT	TTTCTCTCTC	AGACTTAAAG	CAAATTAAAA	550
A R V	P V P F	S L S	D L K	Q I K I	
TAGACCTAGG	TAAATTCICA	GATAAACCCTG	ACGGCTATAT	TGATGTTTTA	600
D L G	K F S	D N P D	G Y I	D V L	
CAAGGGTTAG	GACAATCCTT	TGATCTGACA	TGGAGAGATA	TAATGTTACT	650
Q G L G	Q S F	D L T	W R D I	M L L	
ACTAAATCAG	ACACTAACC	CAATGAGAG	AAGTGGCGCT	GTAAGTCAG	700
L N Q	T L T P	N E R	S A A	V T A A	
CCGAGAGTT	TGGGATCTTT	TGGTATCTCA	GTCAGGCCAA	CAATAGGATG	750
R E F	G D L	W Y L S	Q A N	N R M	

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Fig. 8B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
ACAACAGAGG	AAAGAACAAC	TCCACAGGC	CAGCAGGCAG	TTCACAGTGT	800
T T E E	R T T	P T G	Q Q A V	P S V	
AGACCCATCAT	TGGGACACAG	AATCAGAACA	TGGAGATTGG	TGCCACAAAC	850
D P H	W D T E	S E H	G D W	C H K H	
ATTGCTAAC	TTCGGTGCTA	GAAGGACTGA	GGAAACTAG	GAAGAAGCCT	900
L L T	C V L	E G L R	K T R	K K P	
ATGAATTACT	CAATGATGTC	CACTATAACA	CAGGGAAAGG	AAGAAAATCT	950
M N Y S	M M S	T I T	Q G K E	E N L	
TACTGCTTTT	CTGGACAGAC	TAAGGGAGGC	ATTGAGGAAG	CATACCTOCC	1000
T A F	L D R L	R E A	L R K	H T S L	
TGTCACCTGA	CTCTATTGAA	GGCCAACTAA	TCTTAAAGGA	TAAGTTTATC	1050
S P D	S I E	G Q L I	L K D	K F I	
ACTCAGTCAG	CTGCAGACAT	TAGAAAAAAC	TTCAAAAGTC	TGCCTAAGCT	1100
T Q S A	A D I	R K N	F K S L	P K L	
TGCGGCGGCA	CTCGAGCACC	ACCAACCACCA	CCACTGAGAT	CCGGCTGCTA	1150
A A A	L E H H	H H H	H . D	P A A N	
ACAAAGCCCC	AAAGGAAGCT	GAGTTGGCTG	GTGGCA		1186
K A R	K E A	E L A G	G		

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Fig. 9A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
TGTCGCTGT	GCTCCTGATC	CAGCACAGGC	GCCCATTTGCC	TCTCCCAATT	50
C P L C	S . S	S T G	A H C L	S Q L	
V R C	A P D P	A Q A	P I A	S P N W	
S A V	L L I	Q H R R	P L P	L P I	
GGGCTAAAGG	CTTGCCATTG	TTCTTGACACA	GCTAAGTTGCC	TGGGTTTCATC	100
G . R	L A I V	P A Q	L S A	W V H P	
A K G	L P L	F L H S	. V P	G F I	
G L K A	C H C	S C T	A K C L	G S S	
CTAATCGAGC	TGAACACTAG	TCACTGGGTT	CCACGGTTCT	CTTCATGAC	150
N R A	E H .	S L G S	T V L	F H D	
L I E L	N T S	H W V	P R F S	S M T	
. S S	. T L V	T G F	H G S	L P . P	
CCATGGCTTC	TAATAGAGCT	ATAACACTCA	CTGCATGGTC	CAAGATTCCA	200
P W L L	I E L	. H S	L H G P	R F H	
H G F	. . S Y	N T H	C M V	Q D S I	
M A S	N R A	I T L T	A W S	K I P	
TTCTTTGGAA	TCGTTGAGAC	CAAGAACCCC	AGGTCAGAGA	ACACAAGGCT	250
S L E	S V R P	R T P	G Q R	T Q G L	
P W N	P . D	Q E P Q	V R E	H K A	
F L G I	R E T	K N P	R S E N	T R L	
TGCCAOCATG	TTGGAAGCAG	CCCACCACCA	TTTTGGAAGC	AGCCCGCCAC	300
P P C	W K Q	P T T I	L E A	A R H	
C H H V	G S S	P P P	F W K Q	P A T	
A T M	L E A A	H H H	F G S	S P P L	
TATCTTGGGA	GCTCTGGGAG	CAAGGACCCC	AGGTAACAAT	TTGGTGACCA	350
Y L G S	S G S	K D P R	. Q F	G D H	
I L G	A L G A	R T P	G N N	L V T T	
S W E	L W E	Q G P Q	V T I	W . P	
CGAAGGGACC	TGAATCCGCA	ACCATGAAGG	GATCTCCAAA	GCAATTGGAA	400
E G T	. I R N	H E G	I S K	A I G N	
K G P	E S A	T M K G	S P K	Q L E	
R R D L	N P Q	P . R	D L Q S	N W K	

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Fig. 9B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
ATGTTCTCTCC	CAAGGCAAAA	ATGCCCCCTAA	GATGTATTCT	GGAGAATTGG	450
V P P	K A K	M P L R	C I L	E N W	
M F L P	R Q K	C P .	D V F W	R I G	
C S S	Q G K N	A P K	M Y S	G E L G	
GACCAATTIG	ACCTCAGAC	AGTAAGAAAA	AAATGACTTA	TATTCTTCIG	500
D Q F D	P Q T	V R K	K . L I	F F C	
T N L	T L R Q	. E K	N D L	Y S S A	
P I .	P S D	S K K K	M T Y	I L L	
CAGTACCGCC	CTGGCCACGA	TATCTCTTTC	AAGGGGGAGA	AACCTGGCCT	550
S T A	L A T I	S S S	R G R	N L A S	
V P P	W P R	Y P L Q	G G E	T W P	
Q Y R P	G H D	I L F	K G E K	P G L	
CCTGAGGGAA	GTATAAATTA	TAACACCATC	TTACAGCTAG	ACCIGTTTTG	600
. G K	Y K L	. H H L	T A R	P V L	
P E G S	I N Y	N T I	L Q L D	L F C	
L R E V	. I I	T P S	Y S .	T C F V	
TAGAAAAGGA	GGCAAATGGA	GIGAAGTCCC	ATATTTACAA	ACTTTCTTTT	650
. K R R	Q M E	. S A	I F T N	F L F	
R K G	G K W S	E V P	Y L Q	T F F S	
E K E	A N G	V K C H	I Y K	L S F	
CATTAAAAGA	CAACTCGCAA	TTATGTAAAC	AGTGTGATTT	GIGTTCCTAC	700
I K R	Q L A I	M L T V	. F	V F L H	
L K D	N S Q	L C .	Q C D L	C S Y	
H . K T	T R N	Y V N	S V I C	V P T	
ACGGAAGCCC	TCAGATTCTA	CTCCCCACCC	CCGGCATCTC	CCCTGAATCC	750
G S P	Q I L	L P T P	G I S	P E S	
T E A L	R F Y	S P P	P A S P	L N P	
R K P	S D S T	P H P	R H L	P . I P	
CTCCCCAACT	TATT				764
L P N L					
S P T Y					
P Q L I					

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Fig. 10A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
TGTCGGCTGT	GCTCCGTGATC	CAGCACAGGC	GCCCATTTGCC	TCTCCCAATT	50
C P L C S . S	S T G A H C L	S Q L			
V R C A P D P	A Q A P I A	S P N W			
S A V L L I	Q H R R	P L P L P I			
GGGCTAAAGG	CTTGCCATTG	TTCTTGCACA	GCTAAGTGGC	TGGGTTTCATC	100
G . R L A I V	P A Q L S A	W V H P			
A K G L P L	F L H S .	V P G F I			
G L K A C H C	S C T A K C L	G S S			
CTAATCGAGC	TGAACACTAG	TCACTGGGTT	CCACGGTTCT	CTTCCATGAC	150
N R A E H .	S L G S T V L	F H D			
L I E L N T S	H W V P R F S	S M T			
. S S .	T L V T G F	H G S L P .	P		
CCATGGCTTC	TAATAGAGCT	ATAACACTCA	CTGCATGGTC	CAAGATTCCA	200
P W L L I E L .	H S L H G P	R F H			
H G F . .	S Y N T H	C M V Q D S I			
M A S N R A	I T L T A W S	K I P			
TTCCITGGAA	TCCGTGAGAC	CAAGAACCCC	AGGTCAGAGA	ACACAAGGCT	250
S L E S V R P	R T P G Q R	T Q G L			
P W N P .	D Q E P Q V R E	H K A			
F L G I R E T	K N P R S E N	T R L			
TGCCACCATG	TTGGAAGCAG	CCCACCACCA	TTTITGGAAGC	GGCCCGCCAC	300
P P C W K Q	P T T I L E A	A R H			
C H H V G S S	P P P F W K R	P A T			
A T M L E A A	H H H F G S	G P P L			
TATCTTGGGA	GCTCTGGGAG	CAAGGACCCC	CAGGTAACAA	TTTGGTGAAC	350
Y L G S S G S	K D P Q V T I	W . P			
I L G A L G A	R T P R .	Q F G D H			
S W E L W E	Q G P P G N N	L V T			
ACGAAGGGAC	CTGAATCCGC	AACCATGAAG	GGATCTCCAA	AGCAATTGGA	400
R R D L N P Q	P . R D L Q	S N W K			
E G T .	I R N H E G	I S K A I G			
T K G P E S A	T M K G S P K	Q L E			



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Fig. 10B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
AATGTTCTCTC	CCAAGGCAAA	AATGCCCCCTA	AGATGTATTTC	TGGAGAATTG	450
C S S	Q G K	N A P K	M Y S	G E L	
N V P P	K A K	M P L	R C I L	E N W	
M F L	P R Q K	C P .	D V F	W R I G	
GGACCAATCT	GACCCCTCAGA	CAGTAAGAAA	AAAAATGACT	TATATTCTTC	500
G P I .	P S D	S K K	K N D L	Y S S	
D Q S	D P Q T	V R K	K M T	Y I L L	
T N L	T L R Q	. E K	K . L	I F F	
TGCAGTACCG	CCTGGCCACG	GATATCCTCT	TCAAGGGGGA	GAAACCTGGC	550
A V P	P G H G	Y P L	Q G G	E T W P	
Q Y R	L A T	D I L F	K G E	K P G	
C S T A	W P R	I S S	S R G R	N L A	
CTCCTGAGGG	AAGTATAAAT	TATAACACCA	TCTTACAGCT	AGACCTGTTT	600
P E G	S I N	Y N T I	L Q L	D L F	
L L R E	V . I	I T P	S Y S .	T C F	
S . G	K Y K L	. H H	L T A	R P V L	
TGTAGAAAAG	GAGGCAAATG	GAGTGAAGIG	CCATATTTC	AAACTTTCTT	650
C R K G	G K W	S E V	P Y L Q	T F F	
V E K	E A N G	V K C	H I Y	K L S F	
. K R	R Q M E	. S A	I F T	N F L	
TTCATTAAAA	GACAACTCGC	AATTATGTAA	ACAGTGTGAT	TTGTGTCTTA	700
S L K	D N S Q	L C K	Q C D	L C P T	
H . K	T T R	N Y V N	S V I	C V L	
F I K R	Q L A	I M .	T V .	F V S Y	
CAGGAAGCCC	TCAGATCTAC	CTCCCTACCC	CGGCATCTCC	CTGACTCCTT	750
G S P	Q I Y	L P T P	A S P	. L L	
Q E A L	R S T	S L P	R H L P	D S F	
R K P	S D L P	P Y P	G I S	L T P S	
CCCCAACTAA	TAAGGACCCA	CTTCAGCCCA	AACAGTCCAA	AAGGACATAG	800
P Q L I	R T H	F S P	N S P K	G H	
P N . .	G P T	S A Q	T V Q	K D I	
P T N	K D P	L Q P K	Q S K	R T .	

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Fig. 11A

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
GGCATTGATA	GCACCCATCA	GATGGCCAAA	TCATTATTTA	CTGGACCAGG	50
G I D S	T H Q	M A K	S L F T	G P G	
A L I	A P I R	W P N	H Y L	L D Q A	
H . .	H P S	D G Q I	I I Y	W T R	
CCTTTTCAAA	ACTATCAAGC	AGATAGGGCC	CGTGAAGCAT	GCCAAAGAAA	100
L F K	T I K Q	I G P	V K H	A K E I	
F S K	L S S R	. G P	. S M	P K K	
P F Q N	Y Q A	D R A	R E A C	Q R N	
TAATCCCTCG	CCTTATCGCC	ATGTTCTTTC	AGGAGAACAA	AGAACAGGCC	150
I P C	L I A	M F L Q	E N K	E Q A	
. S P A	L S P	C S F	R R T K	N R P	
N P L	P Y R H	V P S	G E Q	R T G H	
ATTACCCAGG	GGAAGACTGG	CAACTAGATT	TTACCCACAT	GGCCAAATGT	200
I T Q G	K T G N	. I	L P T W	P N V	
L P R	G R L A	T R F	Y P H	G Q M S	
Y P G	E D W	Q L D F	T H M	A K C	
CAGGGATTTC	AGCATCTACT	AGTCTGGGCA	GATACTTTCA	CTGGTTGGGT	250
R D F	S I Y .	S G Q	I L S	L V G W	
G I S	A S T	S L G R	Y F H	W L G	
Q G F Q	H L L	V W A	D T F T	G W V	
GGAGTCTTCT	CCTTGTAGGA	CAGAAAAGAC	CCAAGAGGTA	ATAAAGGCAC	300
S L L	L V G	Q K R P	K R .	. R H	
G V F S	L .	D R K D	P R G N	K G T	
E S S	P C R T	E K T	Q E V	I K A L	
TAATGAAATA	ATTCCAGAT	TGGACTTCC	CCCAGGATTA	CAGGGTGACA	350
. . N N	S Q I	W T S	P R I T	G . Q	
N E I	I P R F	G L P	P G L	Q G D N	
M K .	F P D	L D F P	Q D Y	R V T	

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Fig. 11B

10	20	30	40	50	
1234567890	1234567890	1234567890	1234567890	1234567890	
ATGGCCCCGC	TTTCAAGGCT	GCAGTAACCC	AGGGAGTATC	CCAGGTGTTA	400
W P R F Q G C	S N P G S I	P G V R			
G P A F K A	A V T Q G V S	Q V L			
M A P L S R L	Q . P R E Y P	R C .			
GGCATAACAAT	ATCACTTACA	CTGTGCCTGG	AGGCCACAAT	CCTCCAGAAA	450
H T I S L T L C L E	A T I L Q K				
G I Q Y H L H C A W	R P Q S S R K				
A Y N I T Y T V P G	G H N P P E K				
AGTCAAGAAA	ATGAATGAAA	CACTCAAAGA	TCTAAAAAAG	CTAACCCAAG	500
S Q E N E . N T Q R	S K K A N P R				
V K K M N E T L K D	L K K L T Q E				
S R K . M K H S K I	. K S . P K				
AAACCCACAT	TGCATGACCT	GTTCTGTTGC	CTATAACCTT	ACTAAGAATC	550
N P H C M T C S V A	Y N L T K N P				
T H I A . P V L L P	I T L L R I				
K P T L H D L F C C	L . P Y . E S				
CATAACTATC	CCCCAAAAAG	CAGGACTTAG	CCCATACGAG	ATGCTATATG	600
. L S P K K Q D L A	H T R C Y M				
H N Y P P K S R T .	P I R D A I W				
I T I P Q K A G L S	P Y E M L Y G				
GATGGCCTTT	CCTAACCAAT	GACCTTGIGC	TTGACTGAGA	AATGGCCAAC	650
D G L S . P M T L C	L T E K W P T				
M A F P N Q . P C A	. L R N G Q L				
W P F L T N D L V L	D . E M A N				
TTAGTTGCAG	ACATCACCTC	CTTAGCCAAA	TATCAACAAG	TTCTTAAAAC	700
. L Q T S P P . P N	I N K F L K H				
S C R H H L L S Q I	S T S S . N				
L V A D I T S L A K	Y Q Q V L K T				

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Fig. 11C

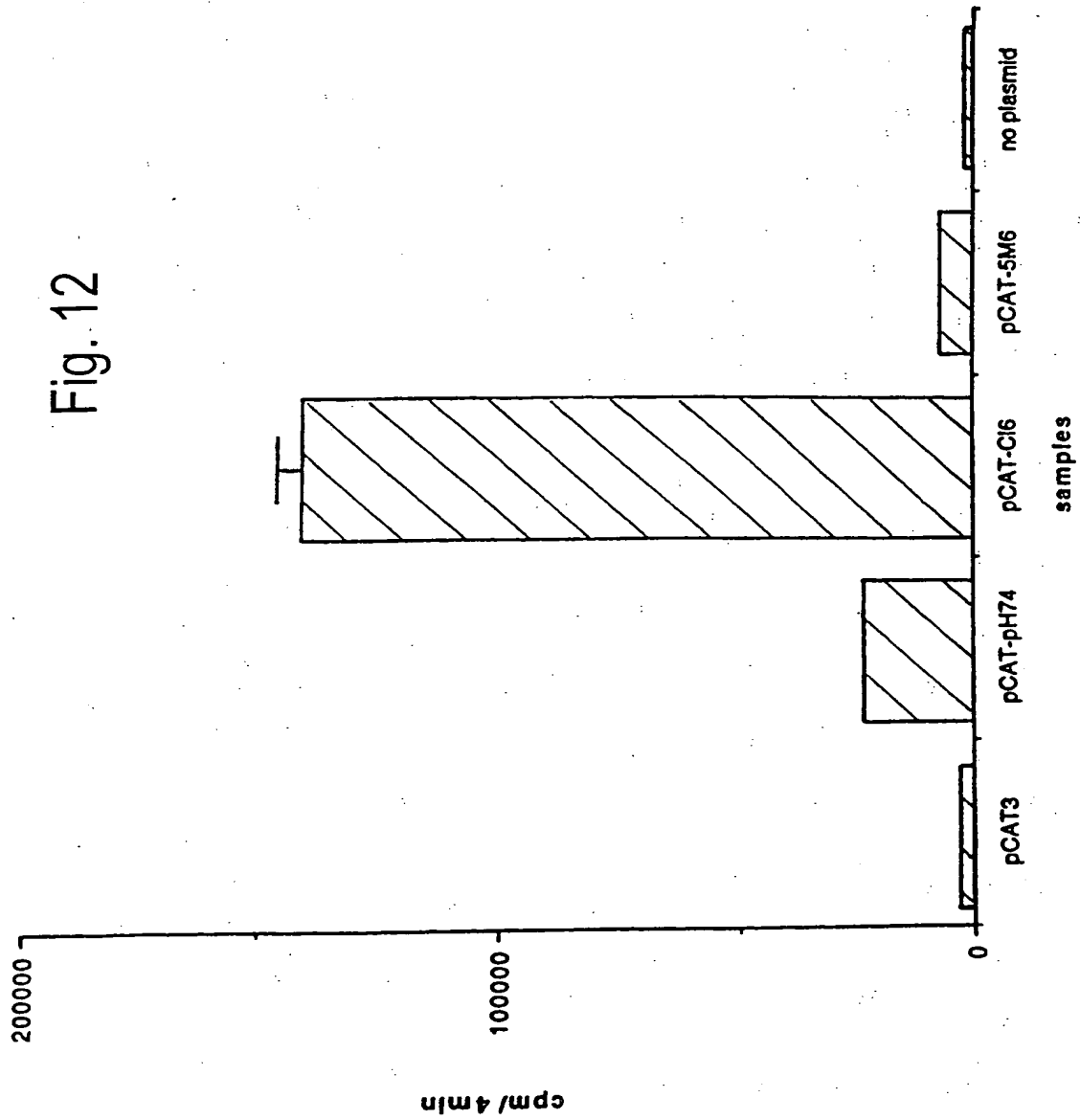
10	20	30	40	50
1234567890	1234567890	1234567890	1234567890	1234567890
ATCACAGGGA	ACCTGTCCCC	GAGAGGAGGG	AAAGGAAC TA	TTCCACCC TG
H R E	P V P	E R R E	R N Y	S T L
I T G N	L S P	R G G	K G T I	P P W
S Q G	T C P R	E E G	K E L	F H P G
GIGACATG				
V T				
. H				
D M				

750

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Fig. 12



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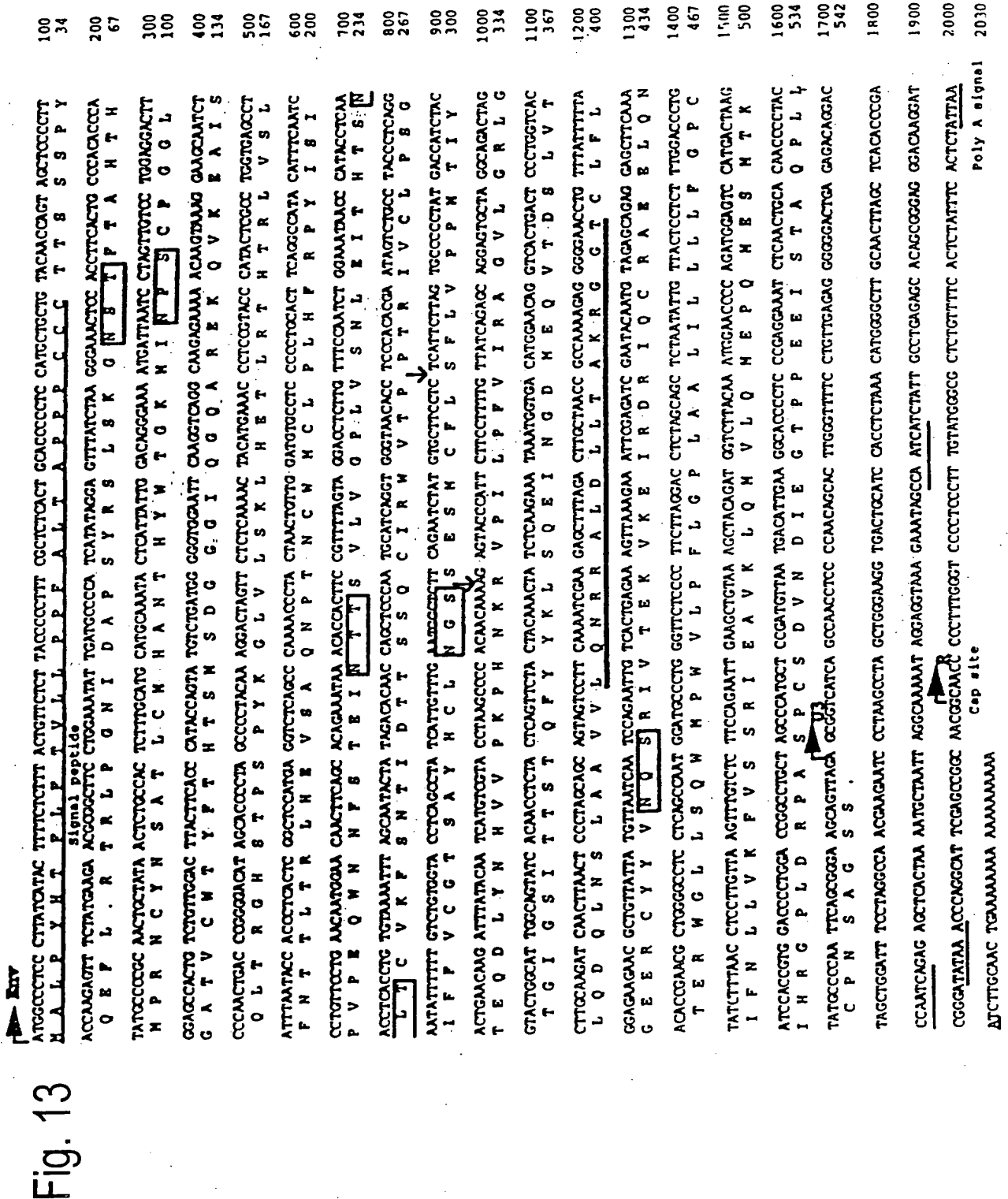


Fig. 14:

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Fig. 15

GACCCGCTAG TATGGGGTAA TCCCTCCCG GAAACCAAGC CCCAGTACTC AGAAGAAGAA ATAGATGGG GAACTCAGC AGGACATGCT TTCTCCCT  
 100 G P V V W G N P L R E T K P Q Y S E E E I E W G T S R G H G P L P S 34  
 CAGGATGGCT AGCCACTGAA GAAGGAAAAA TACTTTTGT GGCAGCTAAC CATGGAAAT TACTTAAAC CCTTCAGCA ACCTTCCACT TAGGCATTGA  
 200 G W L A T E E G K I L L L A A N Q W K L L K T L Q Q T P L L G I D 67  
 TAGCACCAT CAGATAGCCA ATCATTAAT TACTGGACCA GGCCTTTCA AACTATCAA GCATATGTC AGGCTCTGT AGGTGTCCA AGAAATAT  
 300 S T I Q I A K S L P T G P G L P K T I K Q I V R A C E V C Q R N N 100  
 CCCCCTGCTT ATGCCCAAGC TCCTTCAGGA GAACAAGAA CAGGCAATTA CCAAGAGAA GACTGGCAAC TAGATTTTAT CCATGTCCA AATCAGAG  
 400 P L P Y R Q A P S G E Q R T G N Y P R E D W Q L D P I H M P K S Q G 134  
 GATTTCAGTG TCTACTAGTC TGGGTAGATA CTTTCACTGG TTGGGCAGAG GCTTCCCT GTAGGACAGA AAGTTCCA GAGGTAAATA AGGCATAGT  
 500 F Q C L L V W V D T F T G W A E A P P C R T E K P Q E V I K A L V 167  
 TCATCAAGTA ATTCCAGAT TGGGACTTC CTGAGGCTTA CAGATGACA ATGCTCTGC TTCAAGGCC ACAGTAACC AGGAGTATC CCAGGCGTTA  
 600 H E V I P R P G L P G L Q S D N G P A F K A T V T Q G V S Q A L 200  
 GGTATAGAA ATCACTTACA CTGCACCTAG AGGCCAAT CTTCAGGAA GGTGAGAA ATCAACAC TCAAGACA TCTAACAG CTAAACCCAG  
 700 G I E Y H L H C T R P Q S S G K V E K M K T L K R H L N K L T Q E 234  
 AAACCCACT CGCATGCTCT GCTCTGTGT CTATAGCCTT ACTAAGATC CAUACTCT CCAAAAGGC AGGACTTAC CCATACAGA TCGTGTATGG  
 800 T H L A W S A L L S I A L L R I Q N S P Q K A Q L S P Y R M L Y G 267  
 AGGTCTCTC CTAAACCATG ACCTTCTGCT TGACCAAGAG ATGGCCACT TAGTTCCAGA CATCACTCC TTAGCCAAAT ATCAACAGT TCTTAAACA  
 900 R S F L T N D L L L D Q E M A N L V A D I T S L A K Y Q Q V L K T 300  
 TTACAGGAG CCGTGTCCCG AGAGAGGGA AAGAAATAT TCCACCTCG TGTCATGTA TTAGTCAAT CCGTCCCTC TAATCCCA TCCCTAGACA  
 1000 L Q G A C P R E E G K E I P H P G V M V L V K S L P S M S P S L D T 334  
 CATCTGGG AGGACCTTAC CCACTCATTT TATCTATCC ACTCGGTT AAGTGGCTG CAGTGGAGT TTGATACAT CACTTCGAA TCAAACTCTG  
 1100 S W G G P Y P V I L S I P T A V K V A G V E S W I H K T R I K P M 367  
 GATACTCCG AAGAACCCG AAATCCAGG GGACACGCT AGCTATTTCT TTGAACCTT AGAGATCTG TCGTCTCT TCAAGCACA ACCGTGA  
 1197 I L P K E P E N P G D N A S Y F F E P L E D L C L L P K Q Q P . 398



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Fig. 16

100 GAGAGGCA GATAGATG GCTGGGCA GAGGAGAG AGGAGGAA GAGAGGAA GAGAGGAA GAGAGGAA  
E N S S I S W L A E V G K D S K K . R K K G E S Q R K K K R E E E T  
200 GAGAGGAA GAGAGGAA GAGAGGAA AGGAGGAA GAGAGGAA GAGAGGAA GAGAGGAA GAGAGGAA  
K K N L K R E R S S K E K T V Y P I P L K A R V N F C L P S Q G I  
300 XCTGTCTA TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
F F L C G T S T Y I C L P T N W T G T R T L V F L S P N I N I A P  
400 GAGAGGAA GAGAGGAT GAGAGGAA GAGAGGAA GAGAGGAA GAGAGGAA GAGAGGAA GAGAGGAA  
G N Q T L L V P V K A K V R Q C R A I Q L I S L F I G L G M A T A T  
500 GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
G T G I A G L S T S L S Y Y H T L S K N F S D S L Q E I M K S I L  
600 TACTTGCA TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
T L Q S Q L D S L A A M T L Q N R R G P H L L T A E K G G L C T F  
700 TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
L G E E C C F Y T N O S G I V R D A T W H L Q E R A S D I R Q C L S  
800 GAGAGGAT TGTGAGAT GAGAGGAT TGTGAGAT TGTGAGAT TGTGAGAT TGTGAGAT TGTGAGAT  
N S Y T N L W S W A T W L L P F L G P M A A I L L L L T F G P C I  
900 TGTGAGAT TGTGAGAT TGTGAGAT TGTGAGAT TGTGAGAT TGTGAGAT TGTGAGAT TGTGAGAT  
F K L L V K F V S S R I E A I K L Q M V L Q M E P Q M S S T N N F  
1000 TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
Y Q G P L E R S T G T S T S L E I P L W K T L Q L Q G P F F A P I Q  
1100 AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT  
Q E V A R A V I G Q I P N S S W G V L F R G G I E E . A C W Q P  
1200 TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
H S P R W I S V P P Q P W C P L W P C L R S P S A C H C T V G A S  
1300 TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
F W A G Q G R S Q L P Q L A G R Y G G R D A G G N Q G C A W R L R A  
1400 GAGAGGAT TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
S H S S R W A W A R A P H S G S E G L S T W A R Q M L C S T S S  
1500 GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
L G L S C L P R G A G L R E H A A C P C L S P P P R R G F L H S P  
1600 AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT AGGAGGAT  
S F P D K H H P L S T V P S P I N H P R V E E C G H T A R D W Q A V  
1700 TGTGAGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT GAGAGGAT  
P L A A L V R D P L R E A S W A P E S G G D L E N L Y V L L R D C  
1719 TGTGAGAT AGGAGGAT  
K Y T N Q H